DOCKET NO.: RUCC-0046 (98-0087)

Application No.: 09/743840

Office Action Dated: September 24, 2003

PATENT REPLY FILED UNDER EXPEDITED PROCEDURE PURSUANT TO 37 CFR § 1.116

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) A method of producing a transgenic turfgrass plant, comprising the steps of:

- (a) <u>culturing organogenic</u> <u>providing regenerable callus</u> tissue from the turfgrass plant <u>on a medium that promotes de-differentiation of the tissue, to produce regenerable callus tissue;</u>
- (b) inoculating the <u>callus</u> tissue with *Agrobacterium* carrying at least one vector for transformation, the vector comprising virulence genes <u>from plasmid pSB1 or pSB4</u>, in which vector is inserted a heterologous DNA construct and a selectable marker conferring antibiotic resistance to transformed cells, wherein the DNA construct and selectable marker are operably linked to a promoter from a monocotylednous species;
- (c) culturing the inoculated <u>callus</u> tissue under conditions that enable the Agrobacterium vector to transform cells of the issue;
- (d) selectively culturing the inoculated <u>callus</u> tissue on a selection medium comprising an antibiotic, wherein the transformed cells are resistant to the antibiotic; and
- (e) regenerating a transformed turfgrass plant from the selectively cultured callus tissue.
- 2. (Original) The method of claim 1, wherein the turfgrass is a species selected from the group consisting of creeping bentgrass, tall fescue, velvet bentgrass, perennial ryegrass, hard fescue, Chewings fescue, strong creeping fescue, colonial bentgrass and Kentucky bluegrass.
- 3. (Currently amended) The method of claim 1, wherein the *Agrobacterium* eomprises a vector for transformation is a hybrid vector produced from plasmids pSB1 and pSB11 binary vector system and the virulence genes therein are obtained from a plasmid within *Agrobacterium tumefaciens* strain 281.
 - 4. Canceled.

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5. (Original) The method of claim 1, wherein the promoter is selected from the group consisting of maize ubiquitin gene promoters, rice actin gene promoters, maize *Adh* 1 gene promoters, rice or maize tubulin (*Tub* A, B or C) gene promoters, and alfalfa *His* 3 gene promoters.

- 6. (Original) The method of claim 1, wherein the selectable marker gene confers hygromycin resistance on transformed tissue.
- 7. (Currently amended) The method of claim 1, wherein the <u>organogenic tissue is</u> seed tissue eallus is obtained by culturing seeds of a turfgrass plant on a medium that promotes de-differentiation of plant tissue.
 - 8. (Original) A transgenic turfgrass plant prepared by the method of claim 1.
 - 9. (Previously presented) A transgenic seed of the turfgrass plant of claim 8.
- 10. (Original) The transgenic turfgrass plant of claim 8, which comprises a transgene selected from the group consisting of:
 - (a) a gene encoding glucose oxidase;
 - (b) a gene encoding citrate synthase;
- (c) a gene encoding Δ -9 desaturase from Saccharomyces cerevisiae or Cryptococcus curvatus;
 - (d) a gene encoding Δ -11 desaturase;
 - (e) a gene encoding a plant homolog of the neutrophil NADPH oxidase;
 - (f) a gene encoding bacteriospin from Halobacterium halobium; and
 - (g) a gene encoding pokeweed antiviral protein.
 - 11-21. Canceled.